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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,200	12/09/2003	Masaki Ohira	727-003con	6024

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EXAMINER	
HOM, SHICK C	
ART UNIT	PAPER NUMBER
2616	
MAIL DATE	DELIVERY MODE
05/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/733,200	OHIRA ET AL.	
	Examiner	Art Unit	
	Shick C. Hom	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/9/03 & 2/7/04*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/196,900.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/9/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 3-5 and 7-9 are objected to because of the following informalities: In claims 3-5 and 7-9 line 1, the words "A multiplex transmission apparatus" seems to refer back to the "multiplex transmission apparatus" recited in claims 2 and 6 line 1, respectively. If this is true, it is suggested changing "A multiplex transmission apparatus" to ---the multiplex transmission apparatus ---. Appropriate correction is required.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,721,268. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claim 1 merely broaden the scope of the U.S. Patent No. 6,721,268 claim 1 by eliminating the step of whereby inserting being in response to the detection of a fault on said low speed path; wherein the predetermined location is an undefined area capable of carrying the alarm along said high-speed path by through-transport and distinct from APS bytes defined in the transport overhead; and the alarm has a bit pattern applicable to APS bytes of the transport overhead of a multiplex signal of a low-speed path as in claim 1.

It has been held that the omission of a element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969);

omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Verpooten (6,055,226).

Regarding claims 1-3, and 6-7:

Verpooten disclose a method and apparatus of multiplex transmission carried out by a multiplex transmission unit which is located between a low-speed transmission path and a high-speed transmission path (col. 2 lines 43-62 recite the link between the Plesiochronous Digital Hierarch PDH, i.e. low-speed, node and the Synchronous Digital Hierarchy SDH, i.e. high-speed, node, corresponds to the low-speed transmission path and the high-speed transmission path, respectively), said method and apparatus comprising the steps and means of:

inserting an alarm into a predetermined location of the transport overhead of a multiplex signal of said high speed path; and sending by through-transport the resulting multiplex signal to said high-speed path (col. 5 lines 44-55 recite creating the alarm data in the overhead segment, i.e. bit sp2, of the data stream of the Synchronous Digital Hierarchy SDH virtual container and providing the alarm data stream to the next node, clearly anticipate inserting an alarm in a predetermined location of the transport overhead of a high speed path and sending the resulting signal to the high-speed path) as in claims 1-3, 6-7.

Verpooten disclose a plurality of first transceiver units each connected to one of said first communication lines for receiving a signal transferred on the first communication line and processing a first overhead extracted from the received signal;

a multiplexing and conversion unit for multiplexing at least payload portions of a plurality of signals received from said first transceiver units to generate a payload of a signal to be transmitted to said second communication line;

a second transceiver unit connected to said second communication line and said multiplexing and conversion unit for processing a second overhead to be transferred on the second communication line and transmitting a signal having the second overhead and the payload generated by said multiplexing and

conversion unit to said second communication line (col. 4 line 65 to col. 5 line 9 recite reception of higher order data stream coming from the PDH node, the SDH node multiplexing the higher order data stream in the payload of an SDH virtual container, adding an SDH overhead to the payload and providing the data stream to the following SDH node clearly anticipate the first and second transceiver units and the multiplexing and conversion unit for multiplexing at least payload portions and overhead); and

a control unit for controlling the whole operation of the multiplex transmission apparatus, wherein said control unit instructs said second transceiver unit, when said first overhead, received by one of said first transceiver units, includes, at a predetermined location thereof, an alarm indication indicating that a failure occurs on one of said first communication lines, to add the alarm indication to said second overhead (col. 6 lines 24-50 recite network management to support fault localization clearly anticipate the control unit for controlling the whole operation of the multiplex transmission apparatus) as in claims 2, 6; and

Verpooten disclose a demultiplexing and conversion unit for demultiplexing at least a payload portion of the signal received by said first transceiver unit to generate a plurality of signal

payloads to be transmitted to said second communication lines; a plurality of second transceiver units each connected to said demultiplexing and conversion unit and to one of said second communication lines for processing a second overhead to be transferred on the second communication line and transmitting the second overhead and at least a part of said plurality of signal payloads generated by said demultiplexing and conversion unit to the second communication lines (col. 4 lines 42-51 recite the PDH node receiving the higher order data stream; demultiplexing this higher order data stream into low order data segments, associating an overhead segment to these low order data segments, cross-connecting data segments which each include a low order data segment and the associated overhead, deriving from the data segments again the low order data segments and multiplexing the low order data segments again into outgoing higher order data streams which are provided to the next node) as in claim 6.

Regarding claims 4 and 8:

Verpooten disclose wherein each of said first communication lines and said second communication line further comprise a pair including a working line and a protection line, and where said alarm indication gives a trigger for switching from the working

line to the protection line (col. 1 lines 45-56 recite the alarm indication being use to indicate failure on the active path and to switch over from the active path to a back-up path) as in claims 4 and 8.

Regarding claims 5 and 9:

Verpooten disclose wherein said alarm indication is automatic protection switching (APS) byte, and said second transceiver unit inserts a bit pattern into said undefined area at a predetermined location of said second overhead, at least three low-order bits of said bit pattern having an all "1" value (Fig. 2 shows the low-order bits sp1, sp2, .. and col. 5 lines 26-50 and col. 6 lines 15-41 recite the sp1, sp2, … bits being used to indicate particular failure when active) as in claims 5 and 9.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
Parruck discloses a SONET alarm indication signal transmission method and apparatus.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CHI PHAM
SUPERVISORY PATENT EXAMINER 5/16/07